

REMARKS

Claims 1-8 are canceled and replaced by new claims 9-26. Support for the new claims is found in pages 26-39 and 45-50 of the specification. Unlike the canceled claims, which were rejected under 35 U.S.C. §§ 101 and 112, second paragraph, for failing to recite specific steps, the new claims all recite specific methodological steps. Accordingly, Applicants respectfully request that the rejections of the claims be withdrawn.

None of the cited prior art references suggest or provide motivation to one of ordinary skill in the art to make or use the claimed invention wherein:

data elements in the form of m-component vectors $V = \sum_i V_i e_i$ are each represented in the memory by a set of the oligomers E_i and \underline{E}_i that are a subset of all single-stranded oligomers and are each in 1:1 correspondence with the basis vectors e_i for $i = 1, 2, \dots, m$ in an abstract m-dimensional vector space;

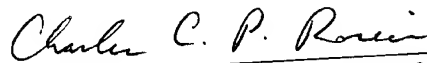
wherein oligomers E_i and \underline{E}_i have complementary nucleotide sequences, with E_i oligomers representing the i-th component of V for which the amplitude V_i is positive, and \underline{E}_i representing the i-th component of V for which V_i is negative; and

wherein the concentration of each of oligomers E_i and \underline{E}_i is proportional to the magnitude of the amplitude V_i of the i-th component of V ;

which are key elements of all of the new claims. Accordingly, Applicants respectfully submit that the claims are allowable over the prior art.

The Examiner is invited to contact the undersigned Applicant's representative if she thinks that an interview would be helpful in clarifying any issues associated with the prosecution of this application.

Respectfully submitted,



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